

Virginia Division of Consolidated Laboratory Services- Richmond, VA

| <b>Chrome VI by Ion Chromatography</b><br><b>EPA 218.6 August 1991</b>                                                                                                                                                                                      |                                        |   |   |     |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---|---|-----|----------|
| Facility Name: _____ VELAP ID: _____                                                                                                                                                                                                                        |                                        |   |   |     |          |
| Assessor Name: _____ Analyst Name: _____ Inspection Date: _____                                                                                                                                                                                             |                                        |   |   |     |          |
| Relevant Aspect of Standards                                                                                                                                                                                                                                | Method Reference                       | Y | N | N/A | Comments |
| Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____                                                                                                                                                                                           |                                        |   |   |     |          |
| Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____                                                                                                                                                                                  |                                        |   |   |     |          |
| Were sample pH's adjusted to pH 9.3-9.7 using ammonium sulfate buffer solution, cooled to $\leq 6^{\circ}\text{C}$ , and analyzed within 28 days? <i>(The preservation temperature does not apply to samples analyzed within 15 minutes of collection.)</i> | 40 CFR 136.3 Table II Footnotes 18, 20 |   |   |     |          |
| Was a linear dynamic range performed using log vs lg plot with a slope of 1 +/- 0.02?                                                                                                                                                                       | 10.2.3                                 |   |   |     |          |
| Are samples filtered through a 0.45 filter ASAP?                                                                                                                                                                                                            | 8.1                                    |   |   |     |          |
| Is pH adjusted to 9.0-9.5 with $\text{NH}_4\text{SO}_4/\text{NaOH}$ buffer solution ASAP?                                                                                                                                                                   | 8.1                                    |   |   |     |          |
| Are sample stored < 10C and analyzed within 28 days?                                                                                                                                                                                                        | 40CFR136.3                             |   |   |     |          |
| Is calibration curve correlation coefficient >0.999?                                                                                                                                                                                                        | 9.1.3                                  |   |   |     |          |
| Is the blank analyzed per batch and less than the MDL?                                                                                                                                                                                                      | 10.3.1                                 |   |   |     |          |
| Is the second source standard exceeds +/- 10% is the analysis repeated?                                                                                                                                                                                     | 9.2.1                                  |   |   |     |          |
| Is CCV analyzed every 10 samples with an acceptance criteria of +/- 5%?                                                                                                                                                                                     | 9.2.2                                  |   |   |     |          |
| Is LFB assessed against calculated control limits, 3 sigma (+/- 10% until sufficient data obtained)?                                                                                                                                                        | 10.3.3                                 |   |   |     |          |
| Is MS analyzed at a 10% frequency and assessed against calculated control limits, 3 sigma (MS calculation not required if spike level is < 10% of sample conc)?                                                                                             | 10.4.3                                 |   |   |     |          |
| Are IC conditions:<br>- Suitable column and guard column?<br>- Eluent of $(\text{NH}_4)_2\text{SO}_4/\text{NH}_4\text{OH}$ ?<br>- Post column reagent of Dephenylcarbohydrazide?<br>- Detector at 530nm?                                                    | Table 2                                |   |   |     |          |
| Notes/Comments:                                                                                                                                                                                                                                             |                                        |   |   |     |          |